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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/697,629

10/29/2003

Oleg Logvinov

103880-037 US

7339

James E. Reeber
Enikia LLC
948 US Highway 22
North Plainfield, NJ 07060

7590

05/18/2007

EXAMINER

DUONG, CHRISTINE T

ART UNIT

PAPER NUMBER

2609

MAIL DATE

DELIVERY MODE

05/18/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



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PRIORITY ACKNOWLEDGMENT

- ☐ 1. Receipt is acknowledged of priority papers submitted under 35 U.S.C. 119. The papers have been placed of record in the file.
- ☐ 2. Applicant's claim for priority, based on papers filed in parent Application Number _____ submitted under 35 U.S.C. 119, is acknowledged.
- ☐ 3. The priority papers, submitted _____, after payment of the issue fee are
- ☐ acknowledged
While the priority claim or certified copy filed will be placed in the file record, neither will be reviewed and the patent when published will not include the priority claim.
See 37 CFR 1.55(a)(2).
- ☐ not acknowledged since the processing fee in 37 CFR 1.17(i) has not been received.
- ☐ 4. For utility and plant applications filed on or after November 29, 2000, the priority claim is not entered because the claim was not presented within the time limit required by 37 CFR 1.55(a)(1). A petition to accept a delayed claim for priority under 35 U.S.C. 119(a) - (d) or (f), or 365(a) may be filed. See 37 CFR 1.55(c) and MPEP 201.14(a).

Manager, Publishing Division
Office of Patent Publication
(703) 305-8388

Office Action Summary	Application No. 10/697,629	Applicant(s) LOGVINOV ET AL.	
	Examiner Christine Duong	Art Unit 2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/29/2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>08/20/2004</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Information Disclosure Statement

The references listed in the Information Disclosure Statement, filed on 20 August 2004, have been considered by the examiner (see attached PTO-1449 form or PTO/SB/08A and 08B forms).

Claim Objections

1. **Claims 1-6** are objected to because of the following informalities:

Regarding **Claims 1, 3-6**, it is suggested to spell out the limitations in acronym form at least once in the set of claims. For example, in Claim 1, it is suggested to write the limitation "MAC/PHY layer controller" in Line 1 as --Medium Access Control/Physical layer controller--; in Claim 3, it is suggested to write the limitation "PLC" in Line 2 as --Powerline Communications--; etc.

Regarding **Claims 1, 3-6**, replace the "/" (forward slash) with its corresponding meaning regarding the limitations "MAC/PHY" and "MDU/MTU".

Regarding **Claim 1**, it is unclear whether the limitation "the programmable coprocessor modules", in Line 3-4, is intended to be the same as or different from the limitation "programmable pre-defined operation hardware coprocessor modules" recited in Line 1-2. If it is the same, it is suggested to rewrite "the programmable coprocessor modules" in Line 3-4 as --the programmable pre-defined operation hardware coprocessor modules--.

Regarding **Claim 2**, it is unclear whether the limitation "the hardware module", in Line 1, is intended to be the same as or different from the limitation "programmable pre-

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defined operation hardware coprocessor modules" recited in Claim 1, Line 1-2. If it is the same, it is suggested to rewrite "the hardware module" in Line 1 as --the programmable pre-defined operation hardware coprocessor modules--.

Regarding **Claim 3-6**, it is unclear whether the limitation "the hardware modules", in Line 1, respectively, is intended to be the same as or different from the limitation "programmable pre-defined operation hardware coprocessor modules" recited in Claim 1, Line 1-2. If it is the same, it is suggested to rewrite "the hardware modules" in Line 1, respectively, as --the programmable pre-defined operation hardware coprocessor modules--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-3, 5-6** are rejected under 35 U.S.C. 102(e) as being anticipated by Schaeffer, JR. et al. (PG Pub US 2003/0062990 A1).

Regarding **Claim 1**, Schaeffer, JR. et al. discloses a very flexible MAC/PHY layer controller ("**media access controller/physical interface (MAC/PHY) 14**", [0050]) comprising programmable pre-defined operation hardware coprocessor modules

including programmable parameterized functions (**“a single MAC/PHY integrated circuit is capable of providing its service for multiple data ports”**, [0071]), wherein the programmable coprocessor modules are coupled to a general purpose processor and hardwired DSP logic (**“The MAC/PHY 14 is any industry standard processor that is capable of 1) preparing data signals for transport on powerlines, and 2) retrieving data signals that have been transmitted via powerlines”**, [0057] and Fig. 13).

Regarding **Claim 2**, Schaeffer, JR. et al. discloses everything claimed as applied above (see *Claim 1*). In addition, the hardware module can be easily adapted to changes in regulatory (**“security is an excellent application of the technology”**, [0092]), device (**“One application of control signals is to send a signal that will turn lights on and off, control audio systems, intercoms, security systems, and television entertainment systems”** [0096] or **“home monitoring devices such as smoke detectors or carbon monoxide detectors”** [0099]) and end-product requirements with simple software changes (**“ability to adapt to protocols in order to transport useful data. Consider the subject of what will be discussed hereinafter as common protocols, cross-protocols, and native protocols”**, [0101]).

Regarding **Claim 3**, Schaeffer, JR. et al. discloses everything claimed as applied above (see *Claim 1*). In addition, the hardware modules are an implementation of a PLC MAC/PHY, targeted at an in-home environment (**“the purpose of the MAC/PHY 14 is to consider it as the bridge between a powerline and whatever other data transport medium is being used”**, [0058] and **“Consider first a group of homes as**

shown in FIG. 8. Typically, a group of homes 130 will all be connected to the same transformer 132 to receive electricity”, [0087] and Fig. 8).

Regarding **Claim 5**, Schaeffer, JR. et al. discloses everything claimed as applied above (see *Claim 1*). In addition, the hardware modules are an implementation of a PLC MAC/PHY, targeted at an MDU/MTU environment (“**the purpose of the MAC/PHY 14 is to consider it as the bridge between a powerline and whatever other data transport medium is being used**”, [0058] and “**the analogous situations that will occur in office buildings or hotel environments. The cost savings of being able to network hotel rooms without having to install computer cabling would be large, especially in larger hotels**”, [0089]).

Regarding **Claim 6**, Schaeffer, JR. et al. discloses everything claimed as applied above (see *Claim 1*). In addition, the hardware modules are an implementation of a MAC/PHY targeted at any communications technology (“**existing powerlines are utilized as a data transport medium whereby computer network data, audio data, video data, control signals, native communication signals, and any combinations thereof are transported via powerlines**”, abstract)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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5. **Claim 4** is rejected under 35 U.S.C. 103(a) as being unpatentable over Schaeffer, JR. et al. further in view of Ashlock et al. (PG Pub US 2002/0095662 A1).

Regarding **Claim 4**, Schaeffer, JR. et al. discloses everything claimed as applied above (see *Claim 1*). However, Schaeffer, JR. et al. fails to specifically disclose that the hardware modules are an implementation of a PLC MAC/PHY, targeted at an access environment, as claimed.

Nevertheless, Ashlock et al. teaches **“the utilization of power line networking to transport signals to a wireless Access Point (AP)”** (Ashlock et al.: [0013]).

Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to apply Schaeffer, JR. et al.'s invention for an access environment because it will **“enable wireless information and/or wireless telephony (commonly referred to, but not limited to Voice-over-IP and/or Voice-over-DSL) by creation and use of power line media adapters”** (Ashlock et al.: [0013]).

Citation of Pertinent Prior Art

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

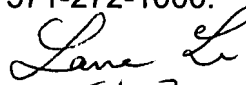
Kostoff, II et al. (PG Pub US 2004/0003338 A1) discloses a transmit process that limits the time during which a reduced network bandwidth exists between two powerline nodes because a receiving node fails to respond to a frame transmission attempts by a transmitting node.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christine Duong whose telephone number is (571) 270-1664. The examiner can normally be reached on Monday - Friday: 730 AM-5 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eliseo Ramos-Feliciano can be reached on (571) 272-7925. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


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LANA LE
PRIMARY EXAMINER

CTD 05/11/2007